

its acceptance for filing, unless prior to such date an interested party files a formal petition to deny or the Commission notifies the applicant that its application will not be automatically granted. Following Petitioners' plan, on the 61st day after the publication of such second public notice, applications for authorizations for response station hubs and for booster stations would henceforth be accepted and processed under the rolling one-day filing window approach. Petitioners argue that there is ample precedent for this approach.⁴⁹ We tentatively conclude to accept in part and deny in part this portion of Petitioners' proposal.

56. We believe the adoption of the one-week initial filing window will lessen the burden on all affected parties, including the Commission's staff, during the first round of application filing. We also believe that providing parties with an initial 60-day period during which they can resolve any apparent conflicts and then amend their applications without prejudice will provide for quicker and easier processing. We believe issuing a public notice announcing the acceptance for filing of all applications as amended will serve an important notice function for all potentially affected parties. As discussed above, however, we do not propose to accept Petitioners' automatic grant proposal. We solicit comments on these issues. Finally, Petitioners have not addressed procedures for amendment of booster station and response station hub applications. We seek comment on how to conform our MDS and ITFS rules to provide for such amendments.

57. In their Comments, Petitioners urge that we adopt a system whereby an applicant, once authorization for service has been granted, may switch from common carrier to non-common carrier service and back without seeking subsequent authorization.⁵⁰ In order to be eligible for this type of flexibility, an applicant would have had to have requested it at the time it filed its application. We seek comment on this aspect of Petitioners' proposal. We also seek comment on whether operators should be required to give the Commission notice when they are switching back and forth between common carrier and non-common carrier service, even if prior approval is not required.

E. Proposals Specifically Regarding Use of 125 kHz Channels

58. Petitioners propose the continued use of the 125 kHz channels as response channels by licensees of channels with which they are associated pursuant to current Section 74.939(d) of the Commission's Rules. These channels would provide further capacity as return paths in the cellularized two-way scheme, and could be superchannelized or subchannelized pursuant to proposed Section 74.939(i). However, in response to the March 31, 1997 *Public Notice's*

⁴⁹ Citing *Amendment of Parts 1, 21, 22, 74, and 94 of the Commission's Rules to Establish Service and Technical Rules for Government and non-Government Fixed Service Usage of the Frequency Bands 932-935 MHz and 941-944 MHz*, 4 FCC Rcd 2012, 2014 (1989). We note that the case cited by Petitioners does not deal with an automatic grant system, but does deal with a system whereby the Commission adopted a one-week filing period for initial applications that was then converted into a rolling one-day filing window system.

⁵⁰ For existing requirements for MDS licensees to provide common-carrier service, see 47 C.F.R. § 21.903.

invitation to propose ways to permit even broader flexibility than initially suggested in the Petition, Petitioners add that the Commission should also permit the use of the 125 kHz channels for point-to-multipoint transmissions and that they should be licensed and afforded interference protection in the same manner as other point-to-multipoint MDS and ITFS facilities. Petitioners explain that for systems using digital technologies, there is a need to transmit downstream control signals over side channels that require less than a full 6 MHz channel, for instance for control over digital set top decoders or control over two-way communication systems. Petitioners maintain that use of the 125 kHz channels for such applications is beneficial in that it preserves the 6 MHz channels for transmissions that require greater bandwidth, and it can lead to reduced equipment costs. Petitioners also propound that to further offer flexibility to create channels with bandwidths exceeding 125 kHz, the Commission should remove the current rule provisions which require that the 125 kHz channels only be used in conjunction with their associated 6 MHz channels under current Section 74.939(d). Finally, Petitioners submit that to avoid confusion where the 125 kHz channels are not used as response channels, each of these channels should receive an independent designation, rather than be referenced to the primary 6 MHz channel with which it is associated. While also proposing that the 125 kHz channels be used for additional point-to-multipoint spectrum, Caritas goes a step further than Petitioners, advancing that the Commission should reallocate the 125 kHz channels to be combined into one continuous piece of spectrum to be used for such purposes.

59. Instructional Telecommunications Foundation, Inc. ("Foundation") vigorously opposes Petitioners' revised proposal on the basis of the Foundation's contention that dissociating the 125 kHz channels from specifically designated 6 MHz channels would open up commercial licensing of the 125 kHz channels associated with ITFS channels. They add that creating upstream channels with bandwidth exceeding 125 kHz can be accomplished by allowing ITFS licensees to trade response channels on a routine basis, so that these channels are no longer interleaved. In their reply to the Foundation, Petitioners deny that the 125 kHz channels associated with ITFS channels would be available for licensing directly to wireless cable operators.

60. We are proposing rules in accordance with the most flexible framework ultimately requested by Petitioners for use of the 125 kHz channels, including allowing superchannelization or subchannelization of these stations regardless of whether they are used as response stations or for point-to-multipoint transmissions.³⁶ We believe that these changes are sufficient to derive the benefits explained by Petitioners, and that a reallocation and the complications associated with that is not necessary. We solicit comment on these proposals regarding use of the 125 kHz channels, especially those which would permit the channels to be used for point-to-multipoint

³⁶ However, in an explanatory note to Petitioners' revised proposal, Petitioners state that proposed changes to Section 74.902(d)(1) are intended to have the effect that "the Commission's restriction on the number of ITFS channels normally available to a licensee only governs the 6 MHz channels, and does not include the 125 kHz channels." Regardless of what Petitioners intend, we clarify the proposed changes to Section 74.902(d)(1) to provide that an ITFS licensee is limited to the assignment of no more than four 6 MHz and four 125 kHz channels for use in a single area of operation.

transmissions and which would remove requirements that each 125 kHz channel be used solely in conjunction with a specifically associated 6 MHz channel.

F. Proposals and Issues Specific to ITFS

61. Section 74.931 of the Commission's Rules describes the purpose and permissible service of ITFS stations, and also sets forth the minimum ITFS programming requirements for ITFS licensees.³⁷ ITFS stations are operated by educational organizations and are "intended primarily to provide a formal educational and cultural development in aural and visual form," to students enrolled for credit in accredited secondary schools, colleges and universities.³⁸ Section 74.931(e)(9) specifies that an ITFS licensee who leases excess channel capacity to a wireless cable operator must provide a total average of at least 20 hours per channel per week of ITFS programming on its authorized channels. ITFS licensees in such lease arrangements also retain the right to recapture "an average of an additional 20 hours per channel per week for simultaneous programming on the number of channels for which it is authorized."³⁹ In addition, Section 74.931(e)(9) allows an ITFS licensee to shift its required educational programming onto fewer than its authorized number of channels via channel loading or channel mapping. The licensee may further agree to transmission of recapture time on channels not authorized to it but which are included in the wireless cable system of which it is a part.

62. All of the commenting ITFS parties support the concepts and goals underlying the Petition. However, several ITFS commenters express fear that the rule changes proposed in the Petition will undermine the primary educational purpose of ITFS. For instance, CTN sees a "resounding commercial emphasis" of the proposed rules and fears that they fail to take into account the needs of ITFS educators. In its reply comments, CTN deduces that the disparity between the number of ITFS and commercial entities commenting on the Petition confirms its initial observation that the proposed rules have been generated primarily from the perspective of the wireless cable industry. In contrast, CMPBA, the licensee of ITFS station WHR-535 in Charlotte, North Carolina, contends that to the extent the wireless cable industry succeeds as the result of adoption of the proposed rules, the ITFS community stands to reap the benefits of technological innovations and the enhanced ability to serve its constituency.

63. Some ITFS commenters also claim that the Petition overemphasizes the financial benefits to ITFS licensees which Petitioners anticipate will result from the proposed rule changes. Pace, for instance, insists that any changes to the rules must promote educational use of ITFS spectrum over the financial benefits which may accrue through leasing of ITFS channels. In addition, WebCel, a prospective bidder in the upcoming LMDS auctions, charges that the leasing of ITFS channels "has increasingly supplanted the public interest aspect of ITFS in favor of

³⁷ See 47 C.F.R. § 74.931.

³⁸ 47 C.F.R. § 74.931(a)(1).

³⁹ 47 C.F.R. § 74.931(e)(9).

commercial subsidies, an erosion that would become virtually complete" if the Commission implements the rule changes proposed in the Petition. Other ITFS commenters, however, tout the importance of the potential financial benefits to ITFS licensees. Thirty-three applicants for ITFS facilities in North Carolina, each of whom filed separate but identical comments, comment that a system integrating video and two-way digital services will attract more subscribers, thereby increasing overall revenue and fees due to ITFS licensees, and ITFS licensees will be able to use this additional income to provide much needed services for their students. CMPBA believes that the Petition strikes proper balances, and concedes that the ITFS community "has come to rely substantially on its commercial partners." Without a commercially viable wireless cable industry, CMPBA adds, the deployment of ITFS spectrum would become much less broad in scope and purpose.

64. The Archdiocese notes how planned lease agreements for its ITFS channels will enable it to finance the extension of its programming to its schools and parishes in outlying counties. We believe that enhancing the competitive viability of wireless cable service through maximization of flexibility and service offerings promotes the underlying educational purpose of ITFS. The growth of wireless cable has led to the continued development of ITFS by supporting and funding approximately 95 percent of all new ITFS applicants.⁴⁰ As we have stated, "revenues are key to this ITFS-MMDS partnership. Leasing channel capacity for the transmission of commercial programming generates revenues that may be vital to the continuing operations of authorized ITFS systems, to the successful deployment in many markets of ITFS service, and to the service's public interest benefits."⁴¹ In evaluating the comments submitted in this proceeding and proposing changes to rules governing permissible service of ITFS stations, ITFS programming requirements, and usage of ITFS spectrum, we are mindful both of our emphasis on the primary educational purpose of ITFS, as well as our desire to in part promote that purpose through enhancements to the competitive viability of wireless cable service.

⁴⁰ MDS Auction Order, 10 FCC Rcd at 9594.

⁴¹ Amendment of Part 74 of the Commission's Rules Governing Use of the Frequencies in the Instructional Television Fixed Service, Report and Order, 9 FCC Rcd 3360, 3364 (1994) ("ITFS Channel Loading Order"). We have elaborated previously that wireless cable strengthens ITFS significantly by providing a source of funds to promote the educational purposes of ITFS, even if educational programming is not transmitted on all ITFS channels. *Id.* We also have agreed that the 20 hours per channel per week ITFS programming standard for licensees leasing excess capacity helps to insure that ITFS licenses are not secured merely to realize financial gain from wireless cable operators. Amendment of Parts 21, 43, 74, 78, and 94 of the Commission's Rules Governing Use of the Frequencies in the 2.1 and 2.5 GHz Bands Affecting: Private Operational-Fixed Service, Multipoint Distribution Service, Multichannel Multipoint Distribution Service, Instructional Television Fixed Service, & Cable Television Relay Service, Order on Reconsideration, 6 FCC Rcd 6764, 6773-74 (1991) ("Wireless Cable Reconsideration Order"). See Amendment of Part 74 of the Commission's Rules Governing Use of the Frequencies in the Instructional Television Fixed Service, Notice of Proposed Rulemaking, 8 FCC Rcd 2828, 2829 (1993) ("ITFS Channel Loading NPRM").

1. ITFS Programming Requirements

65. Petitioners' proposed changes to Section 74.931(e) would revise the absolute 20 hours per channel per week recapture time requirement to provide that the ITFS programming requirements constitute a total of 40 hours per channel per week, including both actual programming and recapture time. The Petition does not contemplate any changes to the required minimum of 20 hours per channel per week of actual ITFS programming. Thus, under the proposed changes, if an ITFS licensee actually provides more than an average of 20 hours per channel per week of ITFS programming, reserved recapture time would only need to make up the difference to achieve a total of 40 hours per channel per week. Petitioners argue that the Commission historically only required a total of 40 hours, and that the current absolute requirement of 20 hours per channel per week of ready recapture time was an inadvertent revision to the Rules. CTN comments that retaining the 20 hour minimum actual programming requirement is inadequate, and insists that as digital compression increases the number of channel paths, there must be a proportionate increase in the number of paths available for education, including data services. Implementing this increase, CTN contends, would ensure that the intended purpose of the ITFS spectrum is not so diminished as to effect a *de facto* reallocation to commercial use. In their reply, Petitioners urge that we reject CTN's suggestion, and they state that we decided in the *Digital Declaratory Ruling* not to impose any increase in ITFS programming requirements where digital modulation is employed. Petitioners claim that many ITFS licensees are finding it difficult to satisfy the existing ITFS minimum programming requirements. Petitioners further pose that adoption of CTN's proposal would create a disincentive for ITFS licensees to introduce the new technologies contemplated by the Petition, which would undermine realization of the benefits that Petitioners assert these technologies are sure to bring ITFS licensees. We solicit comment from ITFS licensees on these comments.

66. When the Commission first imposed a recapture time requirement, it explained that "the intended use of the spectrum will be preserved by requiring that a minimum of forty hours per week . . . must be dedicated for ITFS programming on each channel, so that if only twenty to thirty-nine hours can be currently programmed, additional hours will be . . . subject to ready recapture."⁴² Subsequently, in the *Wireless Cable Reconsideration Order*, the Commission added the absolute 20 hour recapture time language in its revisions to Section 74.931(e)(2). At this time, we find no grounds for retreat from the absolute 20 hour recapture time requirement of Section 74.931(e), especially at this juncture when several wireless cable systems currently enjoy or imminently stand to reap the benefits of increased spectrum capacity through use of digital compression techniques. While we acknowledge the great value to wireless cable operators of maximization of spectrum available for leasing, even the more so in the context of the two-way scheme proposed in this proceeding, we also emphasize the primary educational purpose of ITFS and the importance of maintaining sufficient capacity for programming by ITFS licensees which

⁴² Amendment of Part 74 of the Commission's Rules and Regulations in Regard to the Instructional Television Fixed Service, Second Report and Order (Proceeding Terminated), 101 FCC 2d 49, 87 (1985) ("Second Report and Order in MM Docket No. 83-523"); see also Memorandum Opinion and Order, 59 RR 2d 1355, 1393 (1986).

fulfills that purpose. Indeed, it is this balance which underlies the existence and substance of the ready recapture provisions of Section 74.931(e).

67. In the *Digital Declaratory Ruling*, we declined to impose any changes in ITFS programming requirements during the interim period governed by it, instead deferring consideration of the issue "to a future rulemaking."⁴³ In attempting to treat our interim reluctance to increase ITFS programming requirements as dispositive of the issue before us, Petitioners misconstrue what we decided in the *Digital Declaratory Ruling*, and likewise fail to acknowledge our order that nothing therein would prejudice the outcome of a future rulemaking proceeding establishing rules to govern issues relating to digital transmissions in MDS and ITFS.⁴⁴ In fact, this is the very type of proceeding within which we anticipated that we would address the effect that digital modulation would have on the ITFS service.⁴⁵

68. We specifically seek comment on several issues related to the question of whether to change our ITFS programming requirements in light of the use of digital technology by ITFS licensees. Should there be different rules depending on whether the wireless cable system employs digital transmissions?⁴⁶ If so, how should our treatment vary? Should it take the form of an increase in required levels of actual ITFS programming, an increase in ready recapture time, or both? Would an increase burden ITFS licensees, or would it help them in lease negotiations with wireless cable operators to keep programming levels or reserve recapture time needed for instructional use?⁴⁷ How should any increased requirements be measured, e.g., additional hours or additional paths?⁴⁸

⁴³ 11 FCC Rcd at 18873.

⁴⁴ See *id.* The petitioners in that proceeding conceded that an interim ruling would not prejudice any rules that might ultimately be adopted establishing the recapture rights of ITFS licensees with respect to the increased capacity made available by digital compression. *Id.* at 18872-73.

⁴⁵ Thus, we also reject the assumption expressed by Arizona that the rules adopted in this proceeding are not intended to foreclose, and are subject to the outcome of, our consideration of a separate petition for declaratory ruling on ITFS programming requirements filed by the National ITFS Association ("NIA"). As we decided in the *Digital Declaratory Ruling*, this rulemaking proceeding is the appropriate forum for consideration of these issues.

⁴⁶ Commenters addressing this question should also address how to resolve the scenarios where licensees employ digital operations on one or more, but not necessarily all, of their authorized channels, and where licensees switch from analog to digital and digital to analog modulation among channels and on the same channel. In the *Digital Declaratory Ruling*, we allowed licensees to play out these scenarios. *Digital Declaratory Ruling*, 11 FCC Rcd at 18865.

⁴⁷ This latter question also implicates questions of the role that the Commission should have in protecting ITFS licensees in lease negotiations with wireless cable operators. See ¶ 85, *infra*.

⁴⁸ If an increase in ready recapture time is deemed appropriate, what should be the notification period to the wireless cable operator in order for the ITFS licensee to exercise its recapture rights? Commenters addressing this latter question should discuss whether the six month, reduced notification where channel loading is employed suffices,

69. With the flexibility in implementation of ITFS programming requirements currently allowed or proposed, such as channel loading and shifting of required programming onto other channels within a wireless cable system, should we retain our existing program content requirements and, if not, how should they be modified? For example, should data transmission count towards minimum ITFS programming requirements? Should voice transmission count? If data and/or voice transmission were to count, how would they be measured with respect to fulfillment of minimum ITFS programming requirements? Should time-of-day requirements be instituted for these uses to help ensure that they are really being put towards ITFS programming? Furthermore, should counting one or both of them have an effect on the amount of actual programming or ready recapture time required?⁴⁹ If we increase the minimum programming requirements or ready recapture requirements, how should that affect our content requirements? Petitioners state that "content used in connection with the education of students" would flow from receive sites to response station hubs, as well as to receive sites from primary or booster stations. We also invite comment on whether education-related uplink transmissions should be applied towards satisfaction of minimum ITFS programming requirements. While we note our initial impression that counting uplink transmissions will be overly complicated and impractical, given the anticipated multitudes of response stations and the difficulty in predicting or tracking exactly when they are being used for educational purposes, we nonetheless welcome suggestions on how they would be measured with respect to fulfillment of minimum ITFS programming requirements.

2. Shift of ITFS Programming Onto Other Channels in the Wireless Cable System

70. Petitioners anticipate that system developers will attempt to utilize contiguous 6 MHz channels for two-way services in order to minimize the amount of spectrum that would be lost to the proposed spectral mask whenever a return path is adjacent to a downlink channel. Furthermore, depending on the demand for two-way services, entire ITFS channel groups may need to be devoted for return paths. Thus, Petitioners propose to amend Section 74.931(e)(9) to allow ITFS licensees, at their sole discretion, to satisfy their programming requirements on other channels within the wireless cable system, and not mandate that licensees meet these requirements using at least one of their own channels. Petitioners emphasize, however, that an ITFS licensee would not be forced to shift its programming off of its channels. Petitioners also note that the last sentence of current Section 74.931(e)(9) allows ITFS licensees to shift their recapture time onto other channels within the wireless cable system.

71. The proposal to allow ITFS licensees to shift their programming onto other channels within the wireless cable system, without retaining the requirement that they use at least one of their own authorized channels for such programming, would be the next step in a

and what impact it would have in a system of widespread channel shifting and swapping.

⁴⁹ Cf. *Second Report and Order in MM Docket No. 83-523*, 101 FCC 2d at 87 n.43: "It is notable that compliance with these [day-of-week programming] standards is further eased by the expansion of the definition of "permissible use" programming which will meet this qualification."

progression of rule changes that have afforded ITFS licensees increased flexibility in the implementation of their minimum programming requirements.⁵⁰ In the *ITFS Channel Loading Order*, we adopted the view that "it is most practicable to view a licensee's group of four ITFS channels as an integral constituent of a market-wide set of channels."⁵¹

72. Some commenters express concern that full implementation of the proposed changes to Section 74.931(e)(9) may compromise the autonomy of ITFS licensees. CTN contends that the Petition's proposal for programming shifting needs modification because it does not provide a mechanism for ITFS to maintain and expand its instructional character in a way that corresponds to future cost and interactive communications needs of educators. Citing the *Wireless Cable Reconsideration Order* and the *ITFS Channel Loading Order*, CTN adds that the Commission has previously rejected proposals to allow ITFS licensees to lease their entire capacity. Other ITFS commenters generally support the proposed changes to Section 74.931(e)(9) as they relate to shifting of ITFS programming onto other channels within the wireless cable system. While supporting the proposed changes, Northeastern expresses that the Commission should also propose rules in conjunction which ensure that "substantial use" of the frequencies is maintained for instructional purposes. SWM additionally propounds the "trading" of frequencies within a wireless cable system, and suggests that this would limit the potential for interference to traditional analog ITFS operations in lease arrangements with wireless cable operators, allow continuation of such operations, and avoid "forced participation in a digital video project."

73. In addition to programming shifting, an almost necessary component of this scheme to devote significant blocks of the MDS and ITFS spectrum to return paths involves the continued allowance of channel loading. In the *ITFS Channel Loading Order*, we provided that the channel loading rules adopted there would remain in effect until we assessed the impact of digital compression on MDS and ITFS in a future notice and comment rulemaking proceeding.⁵² Over three years later, and over a year since we adopted the *Digital Declaratory Ruling*, we believe that this proceeding, in which we consider changes to our rules to allow ITFS and MDS licensees to engage in fixed two-way digital transmissions, is the appropriate juncture to reassess our channel loading rules. To this end, as an initial matter, we request that interested parties comment on whether our channel loading rules adopted three years ago have been beneficial to ITFS licensees and wireless cable operators, or whether they have been detrimental. Because we believe that our channel loading rules have provided additional much-needed flexibility to ITFS

⁵⁰ See *Wireless Cable Reconsideration Order*, 6 FCC Rcd at 6774 (allowing the use of channel mapping technology); *ITFS Channel Loading Order*, 9 FCC Rcd 3360 (allowing the use of channel loading, which is the functional equivalent of channel mapping but more cost efficient).

⁵¹ 9 FCC Rcd at 3365.

⁵² *ITFS Channel Loading Order*, 9 FCC Rcd at 3368. In the *ITFS Channel Loading NPRM*, we had proposed to authorize channel loading "for between three and five years, until digital compression technology is a viable alternative, technologically and economically." 8 FCC Rcd at 2831.

licensees and wireless cable operators, and we propose to retain them, any parties commenting that these rules have been detrimental should also focus on solutions to permit the continued application of them while rendering them more universally beneficial.

74. Because the two-way scheme advanced in the Petition could be enhanced by allowing ITFS licensees to shift their programming onto other channels, and because the suggested changes to Section 74.931(e)(9) would not call for any dilution or elimination of minimum ITFS programming requirements, we are considering changes which would enable ITFS licensees to satisfy some or all of their minimum ITFS programming requirements on other channels in the wireless cable system of which their stations are part. The flexibility that the changes would accord to ITFS licensees to lease their channel capacity, along with the maintenance of minimum ITFS programming requirements, could also encourage educators to apply for new ITFS stations and lead to more educational programming. Several proposals have been put forth looking towards providing maximum flexibility in usage of the channels within a wireless cable system, while at the same time safeguarding the continued reservation of spectrum for downstream transmission of ITFS educational programming so that the licensee can continue to deliver such programming if its relationship with the wireless cable operator ends. The DLA ITFS Parties suggest that each ITFS licensee be required to preserve at least one downstream video channel. They continue that in order to make this possible and still permit contiguous channel groupings to be converted to return link use, the Commission should institute a procedure whereby it would routinely grant applications by ITFS licensees to exchange individual ITFS channels between channel groups. The Foundation agrees that the Commission should liberally allow channel exchanges in a given metropolitan area, but would go a step farther than the DLA ITFS Parties and require that each ITFS licensee devote at least half of its capacity for downstream use.⁵³ SWM also encourages the Commission to go a step farther than the DLA ITFS Parties request, by prompting the Commission to facilitate the "trading" of channels between the ITFS and MDS bands. SWM adds that the Commission should adopt a rule with the effect of requiring that wherever an exchange of ITFS channels is permitted, reimbursement of all costs of channel changes should occur, in a manner similar to that required where microwave incumbents relocate to accommodate PCS operators. Caritas advances a different framework altogether; it counter-proposes that the Commission institute a five to ten year plan to convert MDS channels 1, 2, and 2A from their current point-to-multipoint use to be reallocated for upstream multipoint-to-point transmissions, leaving the rest of the ITFS and MDS spectrum for point-to-multipoint use.

75. In their reply, Petitioners state that they do not object to the approach suggested by the DLA ITFS Parties, but that they would prefer if that approach was implemented contractually rather than by Commission fiat. Petitioners strongly support SWM's channel exchange idea, touting that it will afford wireless cable operators and MDS and ITFS licensees

⁵³ Noting the comments of ComSpec regarding response hub interference protection, the Foundation surmises that certain frequencies will be permanently assigned to upstream use on a region-wide basis, and thus will be unavailable for future downstream use.

increased flexibility by helping to address interference concerns, while at the same time providing further safeguards of downstream channel usage for ITFS licensees if their leases terminate. Regarding Caritas' counter-proposal, Petitioners assert that the Commission should not restrict return paths to MDS channels 1 and 2/2A. Doing so, Petitioners explain, would deny ITFS licensees the ability to employ their spectrum more flexibly to use their own channels for return paths, and would artificially limit the amount of spectrum eligible for use by a wireless cable operator for the provision of return paths, while it is anticipated that many wireless cable systems will require more than the 10-12 MHz available on MDS channels 1 and 2/2A for return paths. Furthermore, Petitioners argue, the interference protection rules proposed in the Petition fulfill the Caritas counter-proposal's objective of minimizing the potential for harmful electrical interference from return paths.

76. We seek comments on the merits of these proposals and on several related issues. We particularly seek comment on the effects of allowing complete flexibility in the number of channels "turned around" for return paths, and in the shifting of required ITFS programming onto other channels in the wireless cable system and what restrictions, if any, should be adopted. We also seek comment on whether we should require ITFS licensees to retain one or more channels for downstream transmissions and the ramifications of such a requirement. Further, we seek comment on whether ITFS channel swaps should only be just between ITFS channels, or whether ITFS licensees should be able to swap their spectrum for channels in the MDS band. Besides addressing these questions and ideas, we solicit further proposals for providing flexibility in usage of ITFS channels while ensuring that ITFS licensees are not deprived of capacity for downstream programming.

77. Finally, the proposed changes to Section 74.931(e)(9) would include a provision specifying that the use of channel mapping or channel loading, including the shifting of programming onto other channels in the wireless cable system, would "not be considered adversely to the ITFS licensee in seeking a license renewal or otherwise." The DLA ITFS Parties consider the adoption of this provision critical to the proposed two-way scheme, though they also express concern that the programming shifting proposal could be reviewed by the U.S. Court of Appeals in connection with a license renewal dispute involving an ITFS station taking advantage of that flexibility. We believe that consideration of renewal expectancy is beyond the scope of this proceeding.

3. Autonomy of ITFS Licensees and Agency Role

78. Several of the ITFS commenting parties express concern that the proposed two-way scheme presents threats to the independence of ITFS licensees and their future ability to use spectrum capacity for instructional purposes. CTN, for instance, charges that any new rules and policies must preserve the ability of ITFS licensees to maintain independent control of their stations whether or not they participate in the cellularized system. Pace further cautions that because the Petition proposes a massive shift towards industry control over ITFS applications, the Commission must ensure that individual ITFS licensees "do not lose their freedom of choice" over the use of their channels, through coercion by neighboring licensees or strong wireless cable

operators. CMPBA, however, believes that the proposed rules adequately protect the interests of ITFS entities, primarily because the rules do not obligate ITFS licensees to take part in the two-way system, enter into a lease agreement, file FCC applications, or accept harmful signal levels. CMPBA instead sees a "reality" that the ITFS licensee "has complete and unfettered discretion over how to deploy its channels." Petitioners express their belief that because the post-relationship needs of each ITFS licensee will be different depending on what configuration the licensee chooses to go forward with, the Commission should generally allow the parties to address post-relationship issues by contract.

79. Some of the concerned ITFS commenting parties focus on the effect that the proposed rules may have on the engineering autonomy of ITFS licensees. The DLA ITFS Parties pose the question of what would happen if an excess capacity agreement comes to an end, and the ITFS licensee has previously converted its channels to two-way use and has shifted some or all of its programming onto other channels in the wireless cable system. Similarly, CTN asks what the impact of cellularization of a market would be on one or more ITFS licensees within it who elect not to cellularize, as well as whether a single ITFS licensee who strives to cellularize its operations would be dependent on other licensees in the market. CTN also insists that any proposal to cellularize ITFS frequencies must be permissive, not mandatory. In that regard, the Foundation raises the issue of involuntary modifications in the two-way digital environment, and hopes that the Commission ultimately prevents the filing of such applications that threaten existing and future instructional service.

80. HITN further comments that the rules must contain provisions "which explicitly state that an ITFS signal may not be originated, retransmitted, shifted to a different channel configuration or altered in any way without the express consent of the underlying licensee." Addressing in this context the more narrow issue of whether to allow wireless cable operators to file construction notifications for low power booster stations, instead of vesting this right solely in the pertinent ITFS or MDS licensees, the DLA ITFS Parties state that they do not object to such an approach, so long as it is clear that the operator may not unilaterally continue to operate the booster on the ITFS channels if the agreement between the operator and the ITFS licensee expires or terminates. In their reply, Petitioners maintain that one of the "fundamental precepts of the Petition" is that no ITFS or MDS licensee can be forced to devote its channels to a cellularized transmission system without its consent. Petitioners also reassure that they propose no rule change that would prevent an ITFS licensee from mandating, in its lease with the wireless cable operator, that its programming be transmitted on its own channels.

81. Petitioners assert that the two-way scheme is not designed to force any licensee to devote its channels to a cellularized transmission system.⁵⁴ Those ITFS licensees desiring to

⁵⁴ Section 21.913(a) as proposed by Petitioners contains a provision that "[n]o booster station may be authorized for the reuse of channels authorized to an MDS station without the written consent of the licensee of the station whose channels are reused." In specific response to concerns expressed by HITN and the DLA ITFS Parties regarding operation of low power boosters on the ITFS channels by wireless cable operators after expiration or termination of their lease agreements with ITFS licensees, we propose to replicate that provision in Section 74.985(a)

abstain from cellularization are free to deny efforts by wireless cable lessees to modify leases for cellularization, and ITFS licensees also may decline altogether to lease their excess airtime. We emphasize that cellularization would be permissive only. We will not authorize a two-way framework which involves the mandatory participation of any ITFS licensee.⁵⁵ Uncertainty regarding future disposition of capacity for ITFS programming may be mitigated if, as we expect, the ITFS licensee "know[s] in advance the channel or channels within the transmission system on which to receive its own shifted, recapture-time programming."⁵⁶

82. Notwithstanding all of these safeguards against diminution of the spectrum capacity available for instructional services, we realize that there may be factors or scenarios that we have not considered. Accordingly, we seek additional comment on specific potential threats to the engineering autonomy of ITFS licensees which could result from institution of the proposed two-way framework; in conjunction with such comment, we further seek proposed solutions. As discussed above, some proposed solutions include channel swapping and reimbursement of costs of channel changes, upholding that participation of ITFS licensees in cellularization is not mandatory, and potentially increasing reservation of ready recapture time for ITFS programming.⁵⁷ Do any of these ideas individually, or a combination of them, provide a sufficient foundation for meeting the expanding needs of some ITFS licensees? Commenters are also encouraged to address the general question of whether the Commission should establish solutions by rule, or whether solutions should be achieved by contract, as advocated by Petitioners.

83. In addition to potential threats to the engineering autonomy of ITFS licensees, CTN and Northeastern identify issues relating to possible encroachment upon the financial autonomy of ITFS licensees by implementation of the proposed two-way framework. They question whether the costs of equipment in a cellularized system will render ITFS licensees dependent on wireless cable operators, and whether ITFS licensees will be able to continue operating in a cellular mode if the commercial enterprise is unsuccessful. Petitioners reply that given the breadth of situations that can arise and the varying requirements of wireless cable investors, there is no single solution that will be appropriate in even a majority of circumstances,

and apply it to the reuse of channels authorized to an ITFS station.

⁵⁵ Cf. *ITFS Channel Loading Order*, 9 FCC Rcd at 3367 (reminding ITFS licensees that channel loading is permissive only, and not mandatory). In light of our intentions that cellularization not be mandatory for ITFS licensees, we ask that parties consider ITF's request that we prevent the filing of involuntary modification applications that jeopardize existing and future instructional service. Specifically, is abuse of this mechanism upon implementation of two-way digital services anticipated? Should we restrict the scope of Section 74.986 of the Commission's Rules to involuntary modifications that are consistent with downstream transmissions only? In speculating as to how this mechanism may be utilized in a two-way environment, commenting parties may also recount the extent to which it is currently employed.

⁵⁶ *ITFS Channel Loading Order*, 9 FCC Rcd at 3366.

⁵⁷ The Commission previously has stated that ready recapture time "is the primary means of providing the capacity to meet expanding needs." *Second Report and Order in MM Docket No. 83-523*, 101 FCC 2d at 90 n.46.

and this is reflected in the fact that neither CTN nor Northeastern proposes any specific rules to address this problem. Moreover, according to Petitioners, as with challenges to the engineering autonomy of ITFS licensees, contractual arrangements are the appropriate mechanism for addressing concerns about potential threats to ITFS licensee financial autonomy. We seek comment on this issue.

84. Several commenters also addressed the degree of oversight the Commission should maintain in regulating the wireless cable industry and ITFS. In the past, the Commission has adopted rules and procedures to accommodate and protect the special needs of educational institutions and organizations, believing that "educational institutions should be treated differently from commercial entities in many situations due to limited financial and staff resources, governmental constraints, and similar factors."⁵⁸ In addition, ITFS licensees and applicants are required to file their excess capacity lease agreements, which are reviewed by the staff for overly restrictive provisions affecting the licensee's rights and obligations, and compliance with the Commission's leasing policies.⁵⁹

85. As discussed above, several ITFS commenters expressed concern about the impact of the proposal -- which Pace characterizes as "a massive shift away from the present system of government oversight towards industry control over the timing, filing, and resolution of ITFS applications" -- on their autonomy. The Archdiocese asks that the Commission "ensure that individual licensees do not lose their freedom of choice through coercion," explaining that "[s]chools have limited technical and legal resources As a result, schools must depend increasingly upon their wireless cable operators for such support. However, with each level of incremental reliance, a school cedes a corresponding measure of control." The Foundation states that in its experience, wireless cable operators typically regard instructional programming as "inimical to their goal of offering as many commercial channels as possible" and thus, "have negotiated aggressively to restrict instructional program schedules to the minimum permitted by regulation." According to the Foundation, "[i]t is common for licensees to utilize their lessees' consulting engineers and attorneys, despite the fact that such arrangements leave them without independent advice" and warns that "[t]he lack of independent legal and engineering counsel can be disastrous."⁶⁰ On the other hand, CMPBA believes that the proposed rules adequately protect the interests of ITFS licenses, primarily because the proposed rules do not impose obligations on ITFS licensees who do not wish to become part of a two-way cellular design, and warns that "the

⁵⁸ *Report and Order* in Gen. Docket No. 90-54, 5 FCC Rcd 6410, 6411 (1990).

⁵⁹ *Second Report and Order*, 101 FCC 2d at 90-91.

⁶⁰ For example, the Foundation states that on more than one occasion, its wireless cable operator asked it to sign "no objection" letters to technical proposals from adjacent markets the same operator was developing, only to discover that the proposals produced "serious levels of predicted interference." The Foundation also asserts that "at times operators simply do not fulfill their lease commitments" and that "ITF can attest from direct experience that more than one of today's prominent, publicly-held wireless cable companies has nakedly ignored contractual commitments."

Commission should be wary of being unnecessarily 'paternalistic' when it comes to protecting the ITFS community." We welcome comment on these concerns.

86. In order to ensure that educators retain control of their facilities and to protect their interests, the Foundation proposes that the Commission require that two-way digital applications and interference consents be reviewed by legal and engineering counsel that do not represent commercial interests, and that these independent advisors "certify that in their professional opinion the submission will not be harmful to future instructional service." In response, Petitioners assert that the proposal is unworkable, in that no one can predict the impact of an application or consent on "future instructional service," and is also inappropriate. According to Petitioners, it is the licensee educators, not lawyers or consulting engineers, who are in the best position to determine the educational needs of their community. We have declined in the past to require all leasing parties to hire separate counsel, finding this "safeguard" unnecessary and relying instead on the staff's review and monitoring of lease.⁶¹ We see no reason to change our position on this issue and seek comment on this issue.

87. SW&M also proposes that in order to protect the rights of incumbent ITFS licenses, the Commission require that leases approved or submitted under the previous rules "be amended to make clear that the wireless cable lessee and the ITFS licensee have together considered the rule changes adopted and made any appropriate changes to lease terms, prior to the commencement of commercial operations on the frequencies using cellularization, sectorization or differing channelization plans." Petitioners oppose this proposal, stating that the parties to the excess capacity lease agreements, and not the Commission are best positioned to determine whether proposed system changes require contract revisions. Accordingly, we seek comment on SW&M's proposal. We also seek comment on what impact the proposed rule changes would have on our requirements regarding excess capacity lease agreements. For example, the Commission has consistently maintained an ITFS licensee should be permitted to purchase the ITFS equipment necessary to maintain its operation in the event the lease is terminated.⁶² In addition, we also require that the licensee maintain ultimate control over its licensed facilities. Several commenters have expressed concern that given the complexity and cost of Petitioner's proposal, ITFS licensees will be unable to sever their relationship with the wireless cable operator and acquire the equipment to either continue cellular operations or return to non-two-way transmissions. We particularly seek comment on this matter and on what type of equipment MDS lessees of ITFS channels should be required to make available to the ITFS licensees upon termination of a lease. For example, should it only be digital equipment comparable to that in use on the system at the time the lease is terminated or should it be equipment that would make it possible for the ITFS licensee to restore analog video operation, if necessary? Finally, with respect to Petitioners' proposal that ITFS licensees be allowed to utilize their entire channel for return paths and shift their ITFS programming to other channels,

⁶¹ *Second Report and Order*, 101 FCC 2d at 91.

⁶² *See Turner Independent School District*, 8 FCC Rcd 3153, 3155 (1993).

we request comment on whether the parties should be required to file written agreements governing the ITFS licensee's lease of an ITFS programming channel, and whether our present requirements for excess capacity leases, including those dealing with control issues, length of lease, and rights on termination, should apply.

4. Accountability of ITFS Licensees

88. CTN further comments that the proposal to permit transmissions of more or less than 6 MHz on contiguous channels, which may be licensed to different entities, raises issues of accountability for such transmissions. CTN points to the proposal to eliminate Section 74.982 of the Commission's Rules, the ITFS call sign transmission requirement, as a manifestation of this problem. Petitioners assert that lessors and lessees would be held accountable for transmissions on superchannels on the same basis as they today are held accountable for transmissions. Specifically regarding the proposal to eliminate Section 74.982, Petitioners argue that continued enforcement of the ITFS call sign transmission requirement in a two-way environment will impose substantial costs on ITFS licensees. Petitioners conclude that because it is proposed that the Commission's records will reflect who is transmitting on what channels at all times, the burdens of the call sign transmission requirement far outweigh the benefits.

89. In the *Digital Declaratory Ruling*, we declined to waive the call sign transmission requirements for ITFS stations employing digital technology, instead deferring consideration of the wisdom of continuation of these requirements until a future rulemaking proceeding. We did, however, allow that "the burdens of requiring ITFS licensees to transmit call signs may outweigh the benefits, especially where the channels are leased to a wireless cable operator, whose identity is readily discernible and whose licensing status is readily ascertainable."⁶³ Nevertheless, we recognize the complexity of the interference environment that would result from implementation of the two-way scheme, and the difficulty that this may pose in determining sources of harmful interference. Thus, we seek comment on the proposed elimination of Section 74.982. Where commenters oppose its elimination, we seek proposals for more flexible application of its requirements in a two-way environment, balancing the perceived need to use this device for ITFS licensee accountability against the costs to ITFS licensees and wireless cable operators of doing so. We also solicit alternative solutions for maintaining the accountability of ITFS licensees.

IV. PROCEDURAL MATTERS

90. For purposes of this nonrestricted notice and comment rulemaking proceeding, members of the public are advised that *ex parte* presentations are permitted, except during the Sunshine Agenda period, provided they are disclosed under the Commission's rules. See generally 47 C.F.R. Sections 1.1202, 1.1203 and 1.1206(a).

⁶³ *Digital Declaratory Ruling*, 11 FCC Rcd at 18868.

91. Pursuant to applicable procedures set forth in 47 C.F.R. Sections 1.415 and 1.419, interested parties may file comments on or before December 9, 1997 and reply comments on or before January 8, 1998.⁶⁴ All relevant and timely comments will be considered by the Commission before final action is taken in this proceeding. To file formally in this proceeding, participants must file an original and five copies of all comments, reply comments, and supporting comments. If participants want each Commissioner to receive a personal copy of their comments, an original plus ten copies must be filed. Participants should send comments and reply comments to Office of the Secretary, Federal Communications Commission, Washington, D.C. 20554. Comments and reply comments will be available for public inspection during regular business hours in the FCC Reference Center (Room 239) at the Federal Communications Commission, 1919 M Street, N.W., Washington, D.C. 20554.

92. As required by Section 603 of the Regulatory Flexibility Act of 1980, Pub. L. No. 96-354, 94 Stat. 1164, 5 U.S.C. Section 601, *et. seq.*, the Commission has prepared an Initial Regulatory Flexibility Analysis of the expected impact on small entities of the proposals suggested in this document. See Appendix B. We request written public comment on the analysis. Such comments must be filed in accordance with the same filing deadlines as comments filed in this rulemaking proceeding, but they must have a separate and distinct heading designating them as responses to the Initial Regulatory Flexibility Analysis. IT IS ORDERED that the Commission's Office of Managing Director SHALL SEND a copy of this *Notice*, including the Initial Regulatory Flexibility Analysis, to the Chief Counsel for Advocacy of the Small Business Administration.

93. For further information on this proceeding, please contact Michael J. Jacobs at (202) 418-7066 or Dave Roberts at (202) 418-1600, Video Services Division, Mass Media Bureau.

FEDERAL COMMUNICATIONS COMMISSION

William F. Caton
Acting Secretary

⁶⁴ Noting that many of the parties which filed comments in the initial round of this proceeding are ITFS entities, SWM requested an early Fall comment date in light of the academic schedules which predominate amongst these entities. The comment period that we establish here, therefore, should enhance the ability of ITFS entities to file carefully considered comments and reply comments.

APPENDIX A
LIST OF PETITIONERS AND COMMENTING PARTIES

PETITIONERS

ADC Telecommunications Corp.	George Mason University
Aims Community College	Instructional
Alamosa Public Schools	Foundation, Inc.
Alda Wireless Holdings, Inc.	Humanities Instructional Television
American Communications Services, Inc.	Hybrid Networks, Inc.
American Foundation for Instructional TV	Indiana Higher Education
American Telecasting, Inc.	Telecommunication System
Aquinas and St. Mary's Catholic Schools	Indio Wireless Partnership
Augustina College	Instructional Media Center,
Barnesville Public School	California State University,
Broadband Networks, Inc.	Chico
Broadcast Cable, Inc.	ITS Corporation
Bruning Public School	Ivy Tech State College
C.D.V. Incorporated	Kessler and Gehman Associates,
CAI Wireless Systems, Inc.	Inc.
California Amplifier	Lance Industries
California Human Development Corporation	Lucas County Educational Service
California State University, Stanislaus	Center
Center for Economic & Social Justice	Magellan University
Central Community College Foundation	Malcolm Public Schools
Central Oregon Community College	McConnell Communications, Inc.
CFW Cable, Inc.	Microwave Filter Company, Inc.
Clarendon Foundation	Milwaukee Regional Medical ITS,
Communications & Energy Corp., Inc.	Inc.
Community School of Naples	Missouri Baptist College, ITFS
Comwave	Montrose School District
Concord Community Schools	Multimedia Development
Concordia College	Corporation
Conifer Corporation	National Digital Network,
Cooperative Educational Services Agency #7	Inc.
Cornerstone Christian School System, Inc.	National Wireless Holdings, Inc.
Cross Country Wireless, Inc.	Northern Arizona University
CS Wireless Systems, Inc.	Oklahoma City University
DeLawder Communications, Inc.	Oklahoma Educational Television
Delta-Montrose Area Vocational Technical Center	Authority
Denver Public Schools	Omni Microwave
Digital & Wireless Television	Oregon Public Broadcasting
DiviCom Inc.	Pacific Monolithics, Inc.
Durand Community Unit School District #322	Pacific Telesis Group
EMCEE Broadcast Products	PCTV Gold, Inc.
First Assembly of God, Kahului, Maui, Inc.	Pecatonica Community School

People's Choice TV Corp.
Pikes Peak Community College
Polk Community College
Portland Community College
Preferred Entertainment, Inc.
Pueblo Community College
Pueblo School District 60
Purdue University
Raymond Central School
School District of Oakfield
South Florida Television, Inc.
Specchio Developers Ltd.
Springfield Board of Education
St. Norbert College
Stanford Telecommunications, Inc.
Suncoast Wireless Communications Corporation
Superchannels of Las Vegas, Inc.
Tennessee Wireless
Teton Wireless Television
The Knowledge Network of Greater Omaha
University of Colorado at Colorado Springs
University of Northern Colorado, Academic
Technology Services
University of South Dakota
University of Southern Colorado/KTSC-TV
University of South Florida
Valley Lutheran High School
Views on Learning, Inc.
Virginia Communications, Inc.
W.A.T.C.H. TV Company
Weld County School District RE-1
Winnebago Community Unit District 323
Wireless Cable Association International, Inc.
Wireless Cable Digital Alliance
Wireless Cable of Indianapolis
Wireless Holdings, Inc. (Videotron USA)
Wireless One, Inc.
Wireless One of North Carolina, LLC
Yellowstone Education Center
Yuba Community College
Zenith Digital Media Group

COMMENTERS

ADC Telecommunications Corp. et al. ("Petitioners")
Archdiocese of Los Angeles Education and Welfare Corporation
Arizona State Board of Regents et al.
Asheville-Buncombe Technical Community College
Asheville Christian Academy
Belmont Abbey College
Bladen Community College
Brunswick Community College
Caritas Telecommunications, Inc.
Catholic Television Network, Inc.
College of the Albemarle
ComSpec Corporation
The Crary School
Currituck County Board of Education
Dallas County Community College District et al.
Davidson County Community College
Durham Technical Community College
Edgecombe Community College
Fayetteville Technical Community College
Gaston College
Gulf Coast MDS Service Company
Halifax Community College
Hispanic Information and Telecommunications Network
Instructional Telecommunications Foundation, Inc.
Interactive Video Data Trade Association, Inc.
Isothermal Community College
James Sprunt Community College
Johnston Community College
Lenoir Community College
Meredith College
Mitchell Community College
Moore County Schools
Nash Community College
The National ITFS Association
Northeastern University
Pace Telecommunications Consortium
Pamlico Community College
Randolph Community College
Richmond Community College
Roanoke Bible College
Roanoke Rapids Graded School District
Robeson Community College
Sandhills Community College

Schwartz, Woods & Miller
Spartansburg County School District Two
University of North Carolina
Wake Technical Community College
Wayne Community College
WebCel Communications, Inc.

REPLY COMMENTERS

ADC Telecommunications Corp. et al. ("Petitioners")
Catholic Television Network, Inc.
Charlotte-Mecklenburg Public Broadcasting Authority
WebCel Communications, Inc.

APPENDIX B

Initial Regulatory Flexibility Analysis

As required by the Regulatory Flexibility Act (RFA),^a the Commission has prepared this present Initial Regulatory Flexibility Analysis (IRFA) of the expected significant economic impact on small entities by the policies and rules proposed in this *Notice of Proposed Rule Making* in MM Docket No. 97-217 ("*Notice*"). Written public comments are requested on this IRFA. Comments must be identified as responses to the IRFA and must be filed by the deadlines for comments on the *Notice* provided above in paragraph 92. The Commission will send a copy of the *Notice*, including this IRFA, to the Chief Counsel for Advocacy of the Small Business Administration (SBA). See 5 U.S.C. § 603(a). In addition, the *Notice* and IRFA (or summaries thereof) will be published in the Federal Register. See *id.*

Need for, and Objectives of, the Proposed Rules: The Commission is instituting this rulemaking to determine whether, and if so, how, to amend its rules to promote the ability of MDS and ITFS licensees to provide two-way digital services. The objective of this proceeding is to encourage the efficient use of the spectrum allotted to MDS and ITFS by simplifying our current two-way licensing system and providing greater flexibility in the use of the allotted spectrum where such flexibility would best serve the needs of the public. In addition, we intend to enhance the competitiveness of the wireless cable industry and the resultant choices available to consumers, and to increase Internet access for educational institutions and their students via ITFS frequencies.

Legal Basis: Authority for the action proposed in this proceeding may be found in Sections 4(i) and (j), 301, 303(g) and (r), and 403 of the Communications Act of 1934, as amended, 47 U.S.C. Sections 154(i), 154(j), 301, 303(g), 303(r), and 403.

Description and Estimate of the Number of Small Entities to Which the Proposed Rules Will Apply: The RFA generally defines "small entity" as having the same meaning as the terms "small business," "small organization," and "small business concern."^b In addition, the term "small business" has the same meaning as the term "small business concern" under the Small Business Act.^c A small business concern is one which: (1) is independently owned and operated;

^a See 5 U.S.C. § 603. The RFA, see 5 U.S.C. § 601 *et. seq.*, has been amended by the Contract With America Advancement Act of 1996, Pub. L. No. 104-121, 110 Stat. 847 (1996) (CWAAA). Title II of the CWAAA is the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA).

^b 5 U.S.C. § 601(6).

^c 5 U.S.C. § 601(3) (incorporating by reference the definition of "small business concern" in 15 U.S.C. § 632). Pursuant to 5 U.S.C. § 601(3), the statutory definition of small business applies unless an agency after consultation with the Office of Advocacy of the Small Business Administration and after an opportunity for public comment, establishes one or more definitions of such term which are appropriate to the activities of the agency and publishes definitions in the Federal Register.

(2) is not dominant in its field of operation; and (3) satisfies any additional criteria established by the SBA.^d

MDS: The Commission has defined "small entity" for the auction of MDS as an entity that, together with its affiliates, has average gross annual revenues that are not more than \$40 million for the preceding three calendar years.^e This definition of a small entity in the context of MDS auctions has been approved by the SBA.^f The Commission completed its MDS auction in March 1996 for authorizations in 493 basic trading areas (BTAs). Of 67 winning bidders, 61 qualified as small entities.^g

MDS is also heavily encumbered with licensees of stations authorized prior to the auction. The SBA has developed a definition of small entities for pay television services, which includes all such companies generating \$11 million or less in annual receipts.^h This definition includes multipoint distribution systems, and thus applies to MDS licensees and wireless cable operators which did not participate in the MDS auction. Information available to us indicates that there are 832 of these licensees and operators that do not generate revenue in excess of \$11 million annually. We tentatively conclude that for purposes of this IRFA, there are approximately 892 small MDS providers as defined by the SBA and the Commission's auction rules, and some of these providers may be impacted by the outcome of this *Notice*. We seek comment on this tentative conclusion.

ITFS: There are presently 2032 ITFS licensees. All but 100 of these licenses are held by educational institutions (these 100 fall in the MDS category, above). Educational institutions may be included in the definition of a small entity.ⁱ ITFS is a non-pay, non-commercial broadcast service that, depending on SBA categorization, has, as small entities, entities generating either \$10.5 million or less, or \$11.0 million or less, in annual receipts.^j However, we do not collect, nor are we aware of other collections of, annual revenue data for ITFS licensees. Thus, we

^d Small Business Act, 15 U.S.C. § 632.

^e 47 C.F.R. § 21.961(b)(1).

^f *See Amendment of Parts 21 and 74 of the Commission's Rules With Regard to Filing Procedures in the Multipoint Distribution Service and in the Instructional Television Fixed Service and Implementation of Section 309(j) of the Communications Act - Competitive Bidding*, MM Docket No. 94-31 and PP Docket No. 93-253, Report and Order, 10 FCC Rcd 9589 (1995).

^g One of these small entities, O'ahu Wireless Cable, Inc., was subsequently acquired by GTE Media Ventures, Inc., which did not qualify as a small entity for purposes of the MDS auction.

^h 13 C.F.R. § 121.201.

ⁱ *See* 5 U.S.C. §§ 601 (3)-(5).

^j *See* 13 C.F.R. § 121.210 (SIC 4833, 4841, and 4899).

tentatively conclude that up to 1932 of these educational institutions are small entities. We seek comment on this conclusion.

Description of Reporting, Recordkeeping and Other Compliance Requirements: The Commission seeks comment on proposals to amend its rules to promote the ability of MDS and ITFS licensees to provide two-way digital services, including implementation of simplified procedures governing application for, and authorization of, booster stations and response station hubs. Because the proposed rule changes would enable licensees to apply for and receive authorizations for new types of booster stations and for response station hubs, certain commensurate new reporting and recordkeeping obligations would follow as part of this process, though the nature of the obligations and the MDS and ITFS rules directly addressing them^k would remain the same. At the same time, however, the proposed rule changes would make the overall licensing process for two-way digital services much less cumbersome than the current process, which requires individual licensing of each response station and booster station. In the *Notice*, we request comment on whether we should increase ITFS programming requirements, and if so, in which way and to what degree. While the proposed two-way scheme would result in more complicated interference analysis requirements for MDS and ITFS entities seeking to establish or modify service, regardless of whether the entities themselves choose to engage in fixed two-way transmissions, these interference safeguards are necessary to promote the objectives of this proceeding. We seek comment on these conclusions and how we can modify any proposed new requirements so as to reduce the burden on small entities and still meet the objectives of this proceeding.

Steps Taken to Minimize Significant Economic Impact on Small Entities, and Significant Alternative Considered: As described in the *Notice*, in response to a March 31, 1997 *Public Notice* soliciting comment on the Petition, several of the ITFS commenting parties express concern that the proposed two-way scheme presents threats to the independence of ITFS licensees and their future ability to use spectrum capacity for instructional purposes. Pace, for instance, cautions that because the Petition proposes a massive shift towards industry control over ITFS applications, the Commission must ensure that individual ITFS licensees "do not lose their freedom of choice" over the use of their channels, through coercion by neighboring licensees or strong wireless cable operators. Other commenting ITFS parties, however, do not perceive such a threat. For instance, CMPBA believes that the proposed rules adequately protect the interests of ITFS entities, primarily because the rules do not obligate ITFS licensees to take part in the two-way system, enter into a lease agreement, file FCC applications, or accept harmful signal levels. Nevertheless, in order to find solutions that would allay the concerns of some ITFS licensees, in the *Notice* we seek suggestions on ways to provide maximum flexibility in usage of ITFS channels while ensuring that capacity is reserved for downstream ITFS programming, pose the question of whether solutions should be established by rule or by contract and what role the Commission or other third parties should play in reviewing excess capacity lease agreements, and confirm that cellularization by ITFS licensees would be permissive only, and not mandatory.

^k See, e.g., 47 C.F.R. § 21.911.

CTN raises the concern that Petitioners' one-day rolling application filing window plan and automatic grant proposal will create an undue burden on ITFS licensees who may find themselves required to evaluate a continuing stream of applications. We solicit comment on how such a concern could be resolved in the context of a one-day rolling filing window or whether we should retain a periodic filing window system. Furthermore, we tentatively reject the automatic grant component of Petitioners' application processing proposal, and instead propose a "comment period" of 60 or 120 days, after which applications would be processed pursuant to current procedures. In proposing the comment period alternative, we acknowledge the complexity of the engineering information in the response hub or booster station applications, and the substantial number of affected parties, particularly ITFS licensees, that frequently have very limited resources and that often would not be able to file a petition against an application before the application is automatically granted. Thus, in the *Notice*, we particularly solicit comment from small ITFS operators. Similarly, we express concern that the proposed interference prediction methodology is so complex that it may lead to numerous filings updating system configurations, which would present considerable burdens upon existing licensees and operators needing to analyze these filings. We therefore solicit suggestions for other possible prediction methodologies.

In some instances, a proposed rule will impact different classes of small entities in different ways. For instance, in considering whether to increase ITFS programming requirements, including ready recapture time, we acknowledge in the *Notice* the balance which underlies the existence and substance of the ready recapture provisions of 47 C.F.R. § 74.931(e): the great value to wireless cable operators of maximization of spectrum available for leasing, and the importance of maintaining sufficient capacity for programming by ITFS licensees which fulfills the primary educational purpose of ITFS. We decline to retreat from the current recapture time requirements of Section 74.931(e), but we solicit comment in the *Notice* on whether we should adopt any changes to the number of hours required for ready recapture by ITFS licensees.

Other proposals, tentative conclusions, or questions that we pose in the *Notice* are designed to minimize the impact on all small entities involved. For example, we tentatively reject Caritas' proposal to limit the availability of response channels to MDS channels 1, 2, and 2A, because it would both artificially limit the amount of spectrum that could be used for return paths and unnecessarily prevent ITFS licensees from using their own channels for return paths, while providing no interference protection benefits that cannot be derived in other ways.

CTN and SWM both put forth procedural suggestions for this proceeding. CTN proposes that rather than proceeding with the instant rulemaking, we pursue a negotiated rulemaking procedure and convene a federal advisory committee to evaluate Petitioners' proposals and work out the most effective method to implement them. CTN asserts that this would provide substantial, useful information and facilitate the process initiated by Petitioners. We believe that the instant rulemaking process will provide us with sufficient information to adequately evaluate Petitioners' proposals. In addition, the need for swift consideration of these proposals, in order to enhance the competitiveness of the wireless cable industry and expedite educational institutions' access to the Internet via ITFS frequencies, may be defeated by implementing a potentially lengthy negotiated rulemaking procedure. Thus, we reject CTN's proposal for a negotiated rulemaking

at this time. Should circumstances warrant, however, we reserve the option to revisit our decision on this issue at a later date. Conversely, SWM requests the issuance of an NPRM in this proceeding, and noting that many of the parties which filed comments in the initial round of this proceeding are ITFS entities, requests an early Fall comment date in light of the academic schedules which predominate amongst these entities. The comment period that we establish here, therefore, should enhance the ability of ITFS entities to file carefully considered comments and reply comments. We solicit comment in the *Notice* on other substantive and procedural alternatives to adoption of the proposed two-way digital transmission scheme.

Federal Rules that Overlap, Duplicate or Conflict with the Proposed Rule: None.